

**CLAIMS AS AMENDED HEREIN**  
**WITH STATUS IDENTIFIERS AND MARKINGS TO SHOW CHANGES**

The following claims replace all prior versions of the claims in this application:

We claim:

1   **Claim 1 (currently amended):** A method of measuring the concentration of nitric oxide in a  
2   range of 5 to 200 ppb ~~an analyte~~ in a gas sample of exhaled breath, said method comprising:  
3       providing a first disposable sensor, said first sensor comprising a sensing element  
4             comprising cytochrome-c in a sol-gel, wherein said sensing element undergoes a  
5             change in the presence of 5 to 200 ppb of nitric oxide ~~said analyte~~;  
6       loading said first sensor into a gas analysis device;  
7       measuring the concentration of nitric oxide ~~said analyte~~ in an exhaled breath sample  
8             using said first disposable sensor and said gas analysis device;  
9       removing said first disposable sensor from said device; and  
10      installing a second disposable sensor into said device, said second disposable sensor  
11             likewise comprising a sensing element comprising cyrochrome-c and a sol-gel  
12             and undergoing a change in the presence of 5 to 200 ppb of nitric oxide.

1   **Claim 2 (currently amended):** The method according to claim 1, wherein said first and second  
2   disposable sensors are ~~sensor is~~ within a disposable  housings ~~housing~~.

1   **Claim 3 (original):** The method according to claim 1, wherein said change is a change in an  
2   optically quantifiable characteristic.

1   **Claims 4-6 (canceled)**

1   **Claim 7 (currently amended):** The method according to claim 1, further comprising ~~wherein~~  
2   ~~the step of measuring the concentration of an analyte in a gas sample using said disposable~~

~~sensor and said gas analysis device comprises~~ employing means for ensuring that extraneous signals do not interfere with measurement of nitric oxide.

**Claim 8 (original):** The method according to claim 7, wherein said means for ensuring that extraneous signals do not interfere with measurement comprises two separate channels for analysis of the gas, wherein one of said channels is used for reference analysis.

**Claim 9 (original):** The method according to claim 7, wherein said means for ensuring that extraneous signals do not interfere with measurement comprises using two separate sensing elements for analysis of the gas, wherein one of said elements is used for reference analysis.

**Claim 10 (original):** The method according to claim 1, additionally comprising conditioning the gas sample before measurement.

**Claim 11 (original):** The method according to claim 1, wherein said first disposable sensor uses calibration information associated with said sensor.

**Claims 12-17 (canceled)**

**Claim 18 (currently amended):** A ~~disposable sensor for use with a~~ device for quantifying that quantifies the concentration of nitric oxide in a range of 5 to 200 ppb ~~an analyte~~ in a gaseous sample of exhaled breath, said device comprising:

a disposable sensing element comprising cytochrome-c in a sol-gel and having a nitric oxide measurement range of 5 to 200 ppb; and  
an interface means for interfacing said disposable sensing element ~~sensor~~ with the remainder of said device.

**Claim 19 (currently amended):** The ~~device of sensor according to~~ claim 18, wherein said interface means comprises a means for aligning to align an optical window in said disposable sensing element ~~sensor~~ with an optical transducer ~~appropriate location or locations~~ on said device.

1 **Claim 20 (currently amended):** The ~~device of sensor according to~~ claim 18, wherein said  
2 disposable sensing element generates an electrical signal and said interface means comprises a  
3 means to align electrical contacts on ~~associated with~~ said disposable sensing element ~~sensor~~ with  
4 electrical contacts on the remainder of ~~an appropriate location or locations on~~ said device.

1 **Claim 21 (currently amended):** The sensor according to claim 18, wherein said interface  
2 means comprises a slot in said device and a guide in said disposable sensing element ~~sensor~~.

1 **Claim 22 (currently amended):** A kit for determining ~~analyzing~~ the concentration of nitric  
2 oxide ~~an analyte~~ in a sample of exhaled breath in which said nitric oxide is present in an amount  
3 ranging from 5 to 200 ppb, said kit comprising:

4 a plurality of disposable sensors, wherein said sensors comprise cytochrome-c in a sol-gel  
5 having a nitric oxide response range of 5 to 200 ppb ~~include a disposable sensing~~  
6 ~~element responsive to said analyte;~~

7 a gas analysis device for use with said sensors, said device comprising means for  
8 receiving exhaled breath and converting said response to a measurable signal  
9 ~~measuring the concentration of said analyte in said exhaled breath.~~

1 **Claims 23-27 (canceled)**

1 **Claim 28 (withdrawn):** A sensor for use with a device that quantifies the concentration of an  
2 analyte in a gaseous sample of exhaled breath, comprising:

3 a sensing element; and

4 a use limitation means.

1 **Claim 29 (withdrawn):** The sensor according to claim 28, wherein said use limitations means  
2 comprises a means for preventing or discouraging use of the sensor after it has been used a  
3 certain number of times.

1 **Claim 30 (withdrawn):** The sensor according to claim 29, wherein said certain number of times  
2 is thirty.

1   **Claim 31 (withdrawn):** The sensor according to claim 29, wherein said certain number of times  
2   is one.

1   **Claim 32 (withdrawn):** The sensor according to claim 28, wherein said use limitations means  
2   comprises a means for preventing or discouraging use of the sensor after an expiration date.

1   **Claim 33 (withdrawn):** The sensor according to claim 28 or 32, wherein said use limitations  
2   means comprises an information storage device.

1   **Claim 34 (withdrawn):** The sensor according to claim 33, wherein said information storage  
2   device comprises an integrated circuit.

1   **Claim 35 (withdrawn):** The sensor according to claim 33, wherein said information storage  
2   device comprises a magnetic strip.

1   **Claim 36 (withdrawn):** The sensor according to claim 28, wherein said use limitation means  
2   comprises a means for preventing or discouraging use of the sensor after it has once been  
3   removed from a gas analysis device.

1   **Claim 37 (withdrawn):** The sensor according to claim 36, wherein said use limitations means  
2   comprises a tab.

1   **Claim 38 (withdrawn):** The sensor according to claim 36, wherein said use limitations means  
2   comprises a fuse.

1   **Claim 39 (withdrawn):** The sensor according to claim 36, wherein said use limitations means  
2   comprises a means for detecting a leak within said sensor.

1   **Claim 40 (withdrawn):** A disposable sensor for quantifying the concentration of an analyte in a  
2   gaseous sample of exhaled breath, comprising:

3         a housing;

4         a disposable sensing element within said housing; and

5 a port in said housing for entry of said gaseous sample of exhaled breath; and  
6 means for sealing said port until it is time for the sensor to receive the gas sample of  
7 exhaled breath.

1 **Claim 41 (withdrawn):** The sensor according to claim 40, wherein said means for sealing said  
2 port is a puncturable cover.

1 **Claim 42 (withdrawn):** The sensor according to claim 40, additionally comprising:  
2 a second port in said housing for exit of said gaseous sample of exhaled breath; and  
3 means for sealing said second port until it is time for the sensor to receive a gas sample of  
4 exhaled breath.

1 **Claim 43 (withdrawn):** The sensor according to claim 42, wherein said means for sealing said  
2 second port is a second puncturable cover.

1 **Claim 44 (canceled)**

1 **Claim 45 (currently amended):** The device of sensor according to claim 18 44, further  
2 comprising wherein said means for means for accounting for the effect of interfering signals  
3 comprises two gas cells, one containing said disposable sensing element and the other containing  
4 a second said sensing element and means for selectively removing said nitric oxide from  
5 exposure to said second sensing element within said housing.

1 **Claim 46 (canceled)**

1 **Claim 47 (withdrawn):** A sensor for use with a device that quantifies the concentration of an  
2 analyte in a gaseous sample of exhaled breath, comprising:  
3 a housing;  
4 a disposable sensing element within said housing; and  
5 a first sample conditioning unit within said housing.

1   **Claim 48 (withdrawn):** The sensor according to claim 47, wherein said sample conditioning  
2   unit comprises zeolite (5A or 13x), a silica gel, or another desiccant.

1   **Claim 49 (withdrawn):** The sensor according to claim 47, wherein said sample conditioning  
2   comprises potassium permanganate combined with charcoal or zeolite 3A.

1   **Claim 50 (withdrawn):** The sensor according to claim 47, additionally comprising a second  
2   sample conditioning unit, wherein said first sample conditioning unit is for use in measuring a  
3   first analyte, and said second sample conditioning unit is for use in measuring a second analyte.

1   **Claim 51 (withdrawn):** A sensor for use with a device that quantifies the concentration of an  
2   analyte in a gaseous sample of exhaled breath, comprising:  
3         a housing;  
4         a disposable sensing element within said housing; and  
5         a means for limiting the rate of diffusion of said sample.

1   **Claim 52 (withdrawn):** The sensor according to claim 51, wherein said means for limiting the  
2   rate of diffusion comprises a diffusion port.

1   **Claim 53 (withdrawn):** A disposable sensor for use with a device that quantifies the  
2   concentration of an analyte in a gaseous sample of exhaled breath, comprising:  
3         a disposable sensing element; and  
4         calibration information associated with said sensing element.

1   **Claim 54 (withdrawn):** The sensor according to claim 53, wherein said calibration information  
2   comprises text for reading by a user.

1   **Claim 55 (withdrawn):** The sensor according to claim 54, wherein said text comprises a code.

1   **Claim 56 (withdrawn):** The sensor according to claim 54, wherein said text comprises a  
2   coefficient table.

1   **Claim 57 (withdrawn):** The disposable sensor according to claim 53, wherein said calibration  
2   information is stored in an integrated circuit associated with said sensing element.

1   **Claim 58 (withdrawn):** The disposable sensor according to claim 53, wherein said calibration  
2   information is stored in a bar code associated with said sensing element.

1   **Claim 59 (withdrawn):** The disposable sensor according to claim 53, wherein said calibration  
2   information is stored in an optical code associated with said sensing element.

1   **Claim 60 (withdrawn):** A package of disposable sensors, comprising:  
2         a plurality of disposable sensors for use in analyzing exhaled breath; and  
3         a storage compound placed near said sensors.

1   **Claim 61 (withdrawn):** The package according to claim 60, wherein said storage compound  
2   comprises a desiccant.

1   **Claim 62 (withdrawn):** The package according to claim 60, wherein said storage compound  
2   comprises a salt solution.

1   **Claim 63 (canceled)**

1   **Claim 64 (withdrawn):** A sensor for use with a device that quantifies the concentration of an  
2   analyte in a gaseous sample of exhaled breath, comprising:  
3         a housing with a transparent window;  
4         a disposable sensing element within said housing; and  
5         means for protecting said window from smudges or other optical interferents.

1   **Claim 65 (withdrawn):** The sensor according to claim 64, wherein said means for protecting  
2   said window comprises placing said window in a recess in said housing.

1   **Claim 66 (withdrawn):** The sensor according to claim 64, wherein said means for protecting  
2   said window comprises a protective covering over said window.